

REMARKS

Reconsideration of the patentability of all of the claims of the above referenced application is solicited in view of the above amendments and the following comments. It is believed that the petition for extension of time that is attached hereto and filed herewith is sufficient to maintain the pendency of this application. Should this response not be timely filed, it is submitted that applicant's intention is and has always been to maintain the pendency of this application and not to permit it to become abandoned. It is believed that the fee filed herewith is correct and sufficient. However, if the fee is incorrect, kindly debit or credit an appropriate amount to the undersigned attorneys' deposit account 07-1337.

The examiner's objections, under 35 USC 112, have been considered and claims 20 and 33 have been suitably amended. Other claims have been amended to better define the instant invention. No prohibited new matter has been introduced by these amendments. It is therefore urged that these amendments be entered.

It is noted that the examiner has rejected the patentability of all of applicants' as being anticipated by the disclosure of the cited Seto et al. patent. The rejection is respectfully traversed. In order to support a rejection of the patentability of a claim as being anticipated, a single reference must disclose each and every material feature of the rejected claim. The Seto et al. patent does not conform to these requirements and therefore the rejection on an anticipation basis is improper and should be withdrawn.

This invention is directed to correcting distortions in a deformed image derived from reading an optical code. The instant invention comprises a specific method that is directed to this specific task. It is not directed to correcting a distorted image obtained by scanning the ground from a satellite.

The instant method comprises:

generating a regular grid including a plurality of notable points each of which corresponds to one of the elements of the optical code being read;

generating a grid of the deformed image that is being read so as to identify a plurality of characteristic points of the deformed image wherein each of these characteristic points corresponds to one of the notable points; and

generating, on the regular grid, an undistorted image, by means of a geometrical transformation correlating the characteristic points and the notable points.

By using two grids (a regular grid for the undeformed image and a deformed grid for the deformed images) having two sets of notable points and characteristic points, respectively, which correspond to each other by means of a geometrical transformation, it is possible to correct distortion of the deformed image and to significantly reduce the number of operations and therefore the time that it takes to eliminate these distortions. Indeed, the transformation is carried out only for selected points, one point for each element of the code and not for every pixel of the deformed image.

In the outstanding action, the Examiner has rejected all of the pending claims over a new reference, the cited Seto et al. patent (US 4,682,300). The Seto et al. patent is directed to a processing method for correcting a satellite image where the image includes geometric distortion caused by a high frequency attitude fluctuation. Briefly, the Seto et al. patent calculates distortion correction coefficients covering a high frequency starting from low frequency distortion correction coefficients, calculated by using a low frequency component of the attitude data of the uncorrected satellite image, and from a change rate, calculated by using a high frequency component of attitude data. The corrected image is obtained by applying bidirectional resampling to the uncorrected image by using these distortion correction coefficients covering a high frequency.

Clearly, the Seto et al. patent is directed to a totally different technical field and has a totally different object. In order for this reference to support an anticipation rejection, it must disclose each and every material feature of applicants' claims. This is not such a case here because the rejected claims recite some material features that are not disclosed by Seto.

Indeed, while the Seto et al. reference actually discloses a method for correcting a deformed image, it certainly does not disclose a method for correcting a deformed image derived from reading an optical code. Further, the deformed image of the Seto et al. patent is a satellite image, whereas the deformed image of the instant invention method is on optical code image. The Seto et al. patent certainly does not disclose the generation of a regular grid having a plurality of notable points each of which corresponds to one of the elements of the optical code. In addition thereto, while the Applicants claim that each characteristic point of the deformed grid corresponds to one notable point of the regular grid, the Seto et al. patent discloses a low frequency grid and a high frequency grid which have different resolution and, therefore, do not have corresponding points.

In view of the above comments, it should be abundantly clear that Applicants' invention as claimed is absolutely novel over the disclosure of the cited Seto et al. patent. The outstanding action makes no rejection other than the one based on anticipation. There is no outstanding rejection based on an obviousness theory. However, even if the examiner has made such an obviousness rejection, the disclosure of the Seto et al. patent would not support it either taken alone or taken in combination with the disclosures of other references of record.

In this respect, it should be noted that a person of ordinary skill in this art would not have applied the disclosure of the Seto et al. patent to the problem of resolving and correcting a deformed image of an optical code. The art to which the Seto et al. patent is directed is very far removed from the art to which the instant invention is directed. Seto et al. are trying to correct a Landsat image, whereas the instant inventors are trying to remove deformities from an optical

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code image. The arts to which these are directed is so disparate that one of ordinary skill would not have looked at one to solve a problem in the other.

Further, no person of ordinary skill in the optical code reading art would have combined the disclosure of the Seto et al. patent with disclosures of one or more other references, even other references from the optical code reading art.

It is pointed out that the arguments put forward by the examiner in support of her rejection are not very clear or easily understood. For example, it is uncertain exactly where in the Seto et al. reference the examiner has found basis for rejecting the instant claimed feature that each notable point corresponds to one of the elements of the optical code. There does not appear to be correspondence between this feature and the content of the reference. The examiner does not cite a specific place in the reference where there is a disclosure of this feature. It is further uncertain as to exactly where in the Seto et al. reference the Examiner has found basis for rejecting the claimed feature that each of the characteristic points of the grid of the deformed image **corresponds to one** of the notable points of the regular grid. That is a very material feature of the instant claims. If the reference does not specifically disclose this feature, it cannot have either anticipated the instant claims or even rendered them obvious to a person of ordinary skill in this art. It is urged that the examiner reconsider her position in this matter and find all of the instant claims to be allowable.

Respectfully submitted,
LOWE HAUPTMAN GILMAN & BERNER, LLP

Customer No. 22429


Michael C. Gilman

Registration No. 19,114

1700 Diagonal Road, Suite 300
Alexandria, VA 22314
(703) 684-1111
(703) 518-5499 Facsimile
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